

Power Transducer Series L-UNIT

CT TRANSDUCER

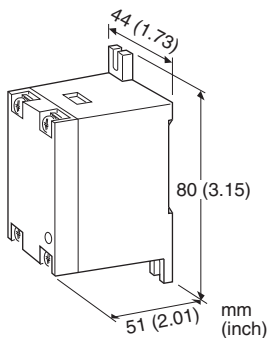
(super-miniature size; self-powered, average sensing, RMS calibrated)

Functions & Features

- Converting an alternating current from a current transformer into a standard process signal
- Minimum ripple
- No auxiliary power source required
- Isolation up to 2000 V AC
- High-density mounting

Typical Applications

- Centralized monitoring and control of motors, pumps or heaters by DCS
- Monitoring power line and power supply current



MODEL: LECA-[1][2][3][4]

ORDERING INFORMATION

- **Code number:** LECA -[1][2][3][4]
- Specify a code from below for each [1] through [4]. (e.g. LECA-51G/Q)
- Load resistance (e.g. 160 Ω)
 - Specify the specification for option code /Q (e.g. /C01/S01)

[1] INPUT

Current

- 1: 0 - 1 A AC
- 5: 0 - 5 A AC

[2] FREQUENCY

- 1: 50 Hz
- 2: 60 Hz

[3] OUTPUT

Current

G: 0 - 1 mA DC

Voltage

- 4: 0 - 10 V DC
- 5: 0 - 5 V DC

[4] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Stand-alone; terminal access at the front

Connection: M4 screw terminals (torque 1.2 N·m)

Screw terminal: Nickel-plated brass (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output

Input waveform: Sine wave

Overrange output: 0 to 120 %

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

Frequency: 50 or 60 Hz

Input burden: 1 VA

Overload capacity: 1000 % of rating for 3 sec., 200 % of rating for 10sec., 120 % continuous

Operational range: 0 - 120 % of rating

OUTPUT SPECIFICATIONS

■ DC Current

Load resistance

(Output Range) 0 - 1 mA DC: $\leq 5000 \Omega$

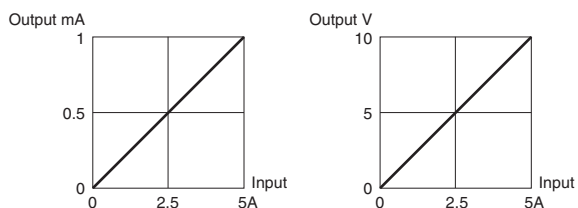
■ DC Voltage

Load resistance

(Output Range) 0 - 10 V DC: $\geq 100 \text{ k}\Omega$

0 - 5 V DC: $\geq 50 \text{ k}\Omega$

■ OPERATION DIAGRAM (example)



INSTALLATION

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 30 to 85 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 170 g (0.37 lb)

PERFORMANCE in percentage of span

Accuracy: $\pm 0.5\%$ (at 23°C $\pm 10^\circ\text{C}$ or 73.4°F $\pm 18^\circ\text{F}$, at rated frequency $\pm 5\%$)

Response time: ≤ 2 sec. (0 - 100 % $\pm 1\%$)

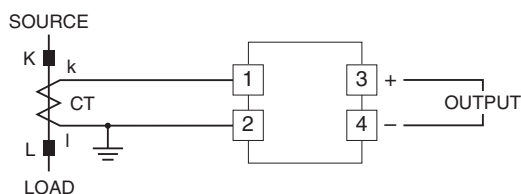
Ripple: 1 %p-p max.

Insulation resistance: $\geq 100\ \text{M}\Omega$ with 500 V DC

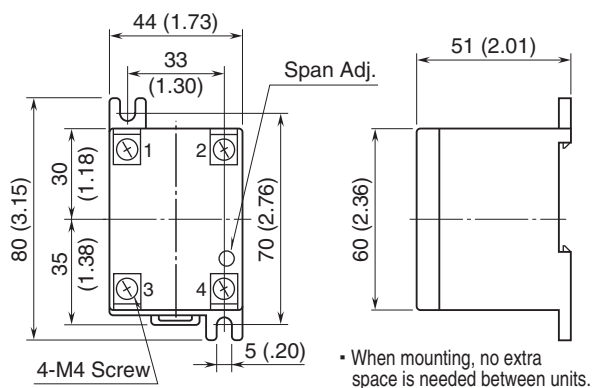
Dielectric strength: 2000 V AC @1 minute
(input to output to ground)

Impulse withstand voltage: 1.2 / 50 $\mu\text{sec.}$, ± 5 kV
(input to output or ground)

CONNECTION DIAGRAM

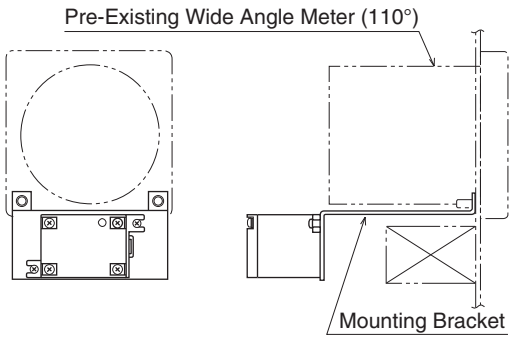


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



■ BRACKET MOUNTING EXAMPLE

If there is no space for mounting, then mounting can be done as per the figure below



Specifications are subject to change without notice.